

To the Mayor and Members of the Lydd Urban Sanitary Authority.

GENTLEMEN,

I have the honour to submit to you my Annual Report on the Sanitary Condition of this Borough during the year ending December 31st, 1897, together with tabulated statements of the various vital statistics.

The large number of cases of infectious disease again detracts from the favourable character of the Report. This constant recurrence, I need hardly say, is a serious menace to the continued health of the inhabitants, and most damaging to the reputation of the district. In this connection, the determination of the Authority to take steps to stamp out in their infancy such outbreaks, and the measures adopted, present some redeeming features that will receive attention in the body of the Report.

Turning first to the vital statistics for the year—

DEATHS.

There were 32 deaths registered as occurring in Lydd during the year 1897. Now, two of these occurred in the persons of strangers temporarily resident in the Borough, and two were bodies of seamen washed ashore on the coast. Neither of these can fairly be included in our death total; but on the other hand one death took place in the Workhouse Infirmary of a Lydd inhabitant which must be added to it; consequently, we have a corrected total of 29 on which to base the annual death rate. This is equal to a mean annual death rate of **13·0** per 1,000 of the population, which, though not so low as in the preceding year, may perhaps be favourably compared with that for the rural portion of England and Wales for the same period, which was 16·4 per 1,000.

BIRTHS DURING 1897.

These numbered 54, of whom 26 were boys and 28 girls. These would be equivalent to a birth rate of **24·3** per 1,000 as compared with—

74	births and rate of	29·6	in 1896.
57	" "	23·1	in 1895.
67	" "	27·0	in 1894.
84	" "	37·0	in 1893.
63	" "	25·7	in 1892.
73	" "	30·3	in 1891.
64	" "	26·4	in 1890.
81	" "	33·5	in 1889.

and rate of 29·7 for England and Wales.

Below I have appended a table showing at a glance the date, population, births and deaths, and death rate, for the previous eleven years, and from this it will be seen how unprecedentedly high the death-rate for 1895 was :—

DATE.	POPULA- TION.	BIRTHS MALES FEMALES			DEATHS MALES FEMALES			RATE PER 1,000
*1885	2,090	70	..	..	25	..	..	11'9
*1886	2,110	48	16	32	27	16	11	12'8
*1887	2,200	64	32	32	32	16	16	14'5
*1888	2,305	63	33	30	28	14	14	12'1
1889	2,030	81	42	39	18	6	12	8'8
1890	2,040	64	35	29	28	14	14	13'7
1891	2,055	73	39	34	24	10	14	11'1
1892	2,070	63	37	26	31	16	15	14'9
1893	2,100	84	42	42	30	16	14	14'2
1894	2,130	67	28	39	22	11	11	10'3
1895	2,160	57	34	23	48	28	20	22'2
1896	2,190	74	38	36	25	18	10	11'4
1897	2,220	54	26	28	29	11	18	13'0

In those years to which an asterisk in the above table has been appended, the military strength has been added to the resident fixed civil population.

The zymotic death-rate, that is, the death-rate from the seven chief zymotic or infectious diseases is only 1'3 per 1,000: that for England and Wales during 1897 was 1'62 per 1,000. This is a matter of satisfaction, looking at the large number of infectious diseases which occurred in the Borough during the year.

In the following table will be seen at a glance how the deaths were distributed with regard to months and quarters, as compared with that for 1896 :—

1897.

January, 2	} 5	April, 5	} 9	July, 2	} 6	October, 1	} 8
February, 2		May, 1		August, 3		November, 2	
March, 1		June, 3		September, 1		December, 5	

1896.

There were in January, 2	} 4	April, 4	} 7	July, 1	} 9	October, 2	} 5
February, 1		May, 2		August, 3		November, 2	
March, 1		June, 1		September, 5		December, 1	

Turning to the ages at which death took place as compared with the preceding year—

	Under 1 year	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards.
1897	5	3	3	2	6	9
1896	4	4	2	1	7	7

Now, comparing this table with one for the last 7 years, there were :—

DATE.	Under 1 year.	1 & under 5.	5 & under 20.	20 & under 40.	40 & under 60.	60 and upwards.
1897	5	3	5	0	5	10
1896	4	4	3	3	2	9
1895	12	8	4	1	2	21
1894	9	4	0	0	3	6
1893	12	1	3	5	1	8
1892	7	9	3	2	1	9
1891	7	2	1	2	2	10
1890	4	1	1	4	8	10

Again turning to the assigned causes of death, there were 6 from Heart Disease, 2 from Consumption, 4 from Apoplexy, 2 from Whooping Cough, 4 from Convulsions, 1 from Diphtheria.

There were no deaths from Scarlet Fever, Diarrhœa, or Ague, or other malarial fever.

From the table above it will appear that there were only five deaths of children under 1 year, or equal to a rate of 92 per 1,000 births, whereas that for England and Wales during 1897 was 156 per 1,000 births. This speaks volumes for the care which is exercised by the mothers of Lydd in the bringing up of infants, especially when taken in connection with the fact that among these five deaths there is not a single one from infantile diarrhœa, for I need hardly tell you that many of the deaths at this tender age are due to carelessness in the artificial feeding of infants, aggravated by dirt and neglect.

There were	4	deaths of persons from	60 to	70.
"	5	"	"	78 to 80.
"	1	"	"	80 to 90.

Dealing now with the infectious diseases of 1897, I received 59 notifications as compared with 92 in 1896.

Thus there were	44	notifications of	Scarlet Fever	as compared with	68	in	1896.
"	"	"	8	"	"	Diphtheria	"
"	"	"	7	"	"	Erysipelas	"

During the early part of the year there was the annual visitation of Influenza, but no deaths are registered as due to this cause. Whooping Cough, too, was rampant through a part of the year: this disorder has two deaths attributed to it. There is great difficulty in dealing with this complaint, for it is not notifiable, it is infectious before the distinctive whoop is developed, and may, therefore, be mistaken in the early stages for an ordinary cold, it is not considered of any importance by parents, and is fostered and spread by school attendance: the incentive for children's attendance, whether fit or not, being the ambition to possess a "Special Attendance Medal." The evil of this attendance, and the remedies therefor I will not here discuss.

With regard to the Scarlet Fever outbreak, the schools were closed, cleaned, and fumigated; the houses of the families affected have been fumigated, and disinfectants supplied. In nearly every instance, I believe, on the notification being received, the parents of the child have been seen, investigations made into the cause of the outbreak, and directions given for such isolation as is possible. I am afraid that the very mildness of the type of disease makes parents indifferent of the dangers of exposure, and intolerant of the comparative restraint that ensues on notification. Children are, under these circumstances, well in a few days after the onset of the attack, and nothing more is said about the matter, they return to school or to play in a state of desquamation, and with their clothes reeking with infection, to spread the disorder broadcast. As I have pointed out for years, home conditions afford no means for adequate separation of sick from healthy, and it seems a great pity that some means cannot be found for joining the surrounding districts in a common Infectious Hospital, managed on modest and economical principles, which shall accommodate the infectious cases of the whole of the Union.

With regard to disinfection, I am glad to be able to say that the Authority has set about remedying the faulty condition of affairs, to which I drew attention in my last Annual Report, by the purchase of a *Theske's* steam disinfecter. I may as well insist again that fumigation alone is an utterly inadequate means of reaching the germs of infectious disease in the nooks, crannies, corners, carpets, mattresses, clothing, and bedding of an infected family. This can only be done by the thorough and systematic removal of such articles to the disinfection chamber, the fumigation of the room and heavy furniture, and the subsequent cleaning and scrubbing, white-washing, and re-papering of the rooms affected. By efficient and systematic notification, isolation, and disinfection, it is possible to prevent any infectious disease becoming epidemic.

With regard to Diphtheria, there were eight cases of this disease notified in the year. I am bound to say that we know so little of the life history of the Diphtheria Bacillus outside the human body, where it lives, and what conduces to its propagation, that we have a difficulty in dealing with it, but that it hangs about in dark, damp, out-of-the-way corners, or in dirty clothes, for a considerable time, to be revived again to life and activity and virulence, is certain. For an instance of this, I

may recall a case which came under the notice of the Authority, and is interesting. A girl came home from Hastings with a sore throat, which, at the time, presented to the medical man no clinical evidences of diphtheria, but which undoubtedly was proved to be so by two other members of the family contracting it (one dying) and the girl herself suffering from the peculiar paralysis which follows this disease. This was on June 9th. No more members of the family contracted the disorder. No other cases occurred in the neighbourhood. The house was fumigated, and supposed to be thoroughly cleaned and scrubbed. On September 5th, however, one of the family was again attacked with diphtheria, and gave it to three other members who had previously escaped. Now, how was this to be explained? Where had the germ lodged? What had galvanised it into life? Had the specific organism remained quiescent in the previous patient's throat, which has been proved to be quite possible? Or had it remained in the walls, the clothes, the furniture, the dust, or the carpets, &c.? These are all interesting questions. The length of time during which a patient remains infectious without actually shewing obvious signs of the disease, and the diagnosis of the various membranous affections of the throat which may be mistaken for actual diphtheria, bear directly on a matter which greatly interests me, and will be referred to later on in the Report.

In dealing with outbreaks of epidemic disease, the Medical Officer of Health often has great difficulty in differentiating the importance of the various factors which might possibly be taken into account, in forming an opinion as to the origin of the outbreak. For instance, attendance at Sunday or day schools, entertainments, visits of, or to friends, attendance at Sunday school treats or teas, purchasing garments from rummage or other sales: for myself, I believe, under certain circumstances, that these last might work unlimited mischief.

Your notice will have been drawn to a very important circular from the Local Government Board as to the preservation of the purity of the water supplies in your district. Hardly a meeting occurs without some reference has to be made to the rather difficult question of the water supply to this Borough. The obtaining of a wholesome supply from the shallow wells sunk in the proximity of dwelling houses, owing to the extremely porous nature of the stratum, is almost an impossibility. Now, Gentlemen, the purity of drinking water is not to be recognised by either the sense of taste, smell, or sight, as the people of Maidstone found to their cost: it can only be ascertained by the help of a chemical and bacteriological examination, the one being the complement of the other. The catchment area of a supply must be free from chance of pollution, the sources of supply above suspicion, and the means of distribution above defilement. Now, in former years, it has been the habit among many authorities to put off the analysis of water until after the outbreak of some disease apparently due to consuming the water, but of the unwisdom of this course I need not here dilate. The public have a right to demand that, at any rate, what the Authority supplies to them, this is, the water from the public pumps, shall be above suspicion, and this can be only guaranteed by the application, at more or less frequent intervals, of one or more of the above-mentioned tests. An analysis, made at intervals, will shew if a water supply is polluted, and, consequently, a source of danger. A polluted water is not necessarily a water containing disease germs (morbific elements), but it cannot be too strongly enforced that where innocuous organisms can penetrate, disease germs can find their way, and if such germs obtain access to a polluted water, they will multiply in it, and result in an epidemic.

Now, Gentlemen, as these frequent analyses are an expensive item to most of the smaller and poorer localities, and as this expense acts as a deterrent to many of the sanitary bodies to whom this circular of the Local Government Board has been sent, I cannot but look forward with some gleam of hope to the fact that the County Council of Kent has at length awoken to a slight extent to the sense of its responsibilities under the Local Government Act of 1888, and that there is a chance of a "Health" Committee being appointed, together with a County Medical Officer, for looking at the trend of modern preventive medicine, and the value in this connection of the discoveries of Klebs and Löffler of the diphtheria bacillus, of the investigations of Koch into the tubercle bacillus, and Eberth and Widal into the typhoid bacillus, and the immense impetus that these have given to the bacteriological

diagnosis of infective disease. Looking, too, at the important rôle which the bacteriologist plays in the diagnosis of doubtful throat affections, and in supplying antitoxin serums, and in the examination of water, I think the time has now come when the care of the public health should be considered as of as much importance as roads and bridges, as of technical education (on which, by the way, such thousands have been absolutely frittered away), as of weights and measures, and of parliamentary bills. Water supply bristles with difficulties. There must be a certain amount of knowledge of the geology of the district, of physiography, of chemistry and engineering, and a large amount of ingenuity and attention to details. These could be supplied by the formation of a Department of Public Health by the County Council, if it would, besides affording unlimited scope in reference to the recognition and prevention and cure of infectious disease, hospital accommodation, tabulation of statistics, inspection of districts, and affording individual Sanitary Authorities help and advice.

Before concluding my Report, I am glad to be able to draw the attention of the Authority to the improvements made in the Railway Gatehouses, and especially to the adoption of the pail closet system. This is by far the cleanest and most perfect method of excrement removal for country districts where the tenant has a garden. How it improves on the stinking, fermenting, evil-smelling privy pit needs no description on my part. The only trouble about it is that it requires emptying every week or so according to the size of the family. I wish I could induce the Authority to more frequently recommend its adoption. Some years ago, I strongly recommended the adoption, by the Authority, of the "Infectious Diseases (Prevention) Act, 1890." It contains several useful clauses in connection with the cleansing and disinfection of premises and bedding, and would be of great help to the officials in utilising the disinfectant which the Council have obtained.

I am glad to say that the Bye-laws have at length been passed, and will greatly add to the powers at the disposal of the Authority in dealing with nuisances, &c., and in improving the sanitary condition of the Borough.

A good deal of sanitary work has been done by your Inspector during the year, most of which is recorded in his journal, and a list of the most urgent is appended:—

Written Notice to remedy stoppage of W.C.	..	1
" " remove filth	..	1
Verbal Notices to clean W.C.	..	6
" " " Piggeries	..	4
" " " Ashpits	..	2
" " " Dumbwells	..	1
" " remove Slaughter-house refuse	..	3
Houses disinfected	..	16

All the various notices to abate nuisances, &c., have been attended to, and remedies applied, without recourse having been had to any of the legal processes at the disposal of the Authority, and I believe the district to be in a satisfactory condition.

I have the honour to be, Gentlemen,

Your obedient Servant,

RICHARD BEVAN,

L.R.C.P., LOND., and D.P.H., ENGLAND,

Medical Officer of Health to the Borough.

Lydd, March 29th, 1898.

